

FCC MAIL SECTION

Federal Communications Commission

DOCKET FILE COPY ORIGINAL

DA 98-277

FEB 13 3 14 PM '98

Before the  
Federal Communications Commission  
Washington, DC 20554

DISPATCHED BY

In the Matter of

Amendment of Part 68 of the  
Commission's Rules

)  
)  
)  
)  
)  
)

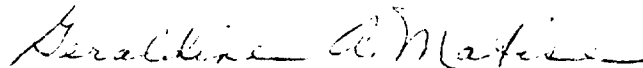
CC Docket No. 96-28

#### ERRATA

Released: February 12, 1998

On August 22, 1997, the Commission released a Report and Order, in this proceeding, CC Docket No. 96-28, FCC 97-270, *Amendment of Part 68*, 12 FCC Rcd 19218 (1997).<sup>1</sup> The final rules in the Report and Order are hereby amended to conform the rules to the text of the Report and Order.

FEDERAL COMMUNICATIONS COMMISSION



Geraldine A. Matisse, Chief  
Network Services Division  
Common Carrier Bureau

---

<sup>1</sup> See 62 FR 61654 (Nov. 19, 1997).

**PART 68 CONNECTION OF TERMINAL EQUIPMENT TO THE TELEPHONE NETWORK**

Accordingly, 47 CFR Part 68 is corrected by making the following correcting amendments:

1. The authority citation for Part 68 continues to read as follows:

AUTHORITY: Sections 1, 4, 5, 201-5, 208, 215, 218, 226, 227, 303, 313, 314, 403, 404, 410, 522 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 155, 201-5, 208, 215, 218, 226, 227, 303, 313, 314, 403, 404, 410, 522.

**§68.2 [corrected].**

2. In §68.2, paragraph (d) is revised by inserting a comma (,) between the words "lines" and "automatic."

\*\*\*\*\*

**§68.3 [corrected].**

3. Section 68.3 is revised by removing figure 68.3(m), and correcting figures 68.3(f) and 68.3(i).

4. In §68.3, reference to "figure 68.3(m)" in the definition "PSDS Type II Analog Mode Loop Simulator Circuit" is revised to read "figure 68.3(k)".

5. In §68.3, under definition "Tie trunk transmission interfaces" paragraphs (d), (e) and (f) are revised to read "paragraphs (c), (d) and (e)".

\*\*\*\*\*

**§68.302 [corrected].**

6. In section 68.302, paragraph (c)(2)(iii) is revised to read as follows: "Under reasonably foreseeable disconnection of primary power sources, as for example, with primary power cords plugged and unplugged."

7. In §68.302, Figures 68.302(Xa), 68.302(Xb) and 68.302(Xc) are corrected to read Figures 68.302(a), 68.302(b) and 68.302(c).

\*\*\*\*\*

**Section 68.306 [corrected].**

8. In §68.306, the figure describing ringing currents immediately following section 68.306(d)(4)(iii) is revised to read "Figure 68.306(a), Illustration of Ring Trip Requirement".

9. In §68.306, the note to paragraphs (e)(1)(i) and (e)(1)(ii) is revised to read as follows:

"Note to paragraph (e)(1)(i) and (e)(1)(ii): (a) For each test point, gradually increase the current from zero to 1 ampere, then maintain the current for one minute. The voltage between (e)(1)(i) and (e)(1)(ii) of this section shall not exceed 0.1 volt at any time. (b) In the event there is a component or circuit in the path to ground, the requirement shall be met between the grounded side of the component or circuit and the earth grounding connection."

\*\*\*\*\*

10. In §68.306, the note to paragraphs (e)(2)(i) and (e)(2)(ii) are revised to read as follows:

"Note to paragraph (e)(2)(i) and (e)(2)(ii): (a) Gradually increase the voltage from zero to 120 volts rms for registered terminal equipment, or 300 volts rms for protective circuitry, then maintain the voltage for one minute. The current between §§ 68.306(e)(2)(i) and (e)(2)(ii) shall not exceed 10 mA peak at any time. (b) As an alternative to carrying out this test on the complete equipment or device, the test may be carried out separately on components, subassemblies, and simulated circuits, outside the unit, provided that the test results would be representative of the results of testing the complete unit."

11. In §68.306, the text from paragraph (e)(3) is redesignated by incorporating the entire paragraph into "note to paragraphs (e)(2)(i) and (e)(2)(ii)", as note(b).

\*\*\*\*\*

**Section 68.308 [corrected].**

12. Section 68.308 is revised by adding paragraph (b)(7)(ii)(C) as follows:

**§68.308 Signal Power Limitations.**

- (a) \*\*\*\*
- (b) \*\*\*\*
- (7) \*\*\*\*
- (i) \*\*\*\*
- (ii) \*\*\*\*
- (A) \*\*\*\*
- (B) \*\*\*\*

(C) Except for Class A OPS interfaces, the dc current into the OPS line simulator circuit must be at least 20 mA for the following conditions (see Figure 68.3(f)):

R2 + RL		
Condition	Class B	Class C
1	600	1300
2	1800	2500

13. In §68.308, Table 68.308(a) is revised by adding the following three rows:

" 9200 ..... -10 dBm  
 19800 ..... -11 dBm  
 Open ..... -12 dBm "

14. In §68.308, paragraphs (b)(6)(i) and (b)(6)(ii), the formulas are revised to read as follows:

(i) For the two-wire interface:

$$RL \geq \begin{cases} 9 - 3 \frac{\log(f/200)}{\log(2.5)} \text{ dB} & ; \text{ for } 200 \text{ Hz} \leq f \leq 500 \text{ Hz} \\ 6 \text{ dB} & ; \text{ for } 500 \text{ Hz} \leq f \leq 3200 \text{ Hz} \end{cases}$$

(ii) For the four-wire lossless interface:

$$t_{l_f} \geq \begin{cases} 10 - 4 \frac{\log(f/200)}{\log(2.5)} \text{ dB} & ; \text{ for } 200 \text{ Hz} \leq f \leq 500 \text{ Hz} \\ 6 \text{ dB} & ; \text{ for } 500 \text{ Hz} \leq f \leq 3200 \text{ Hz} \end{cases}$$

$$t_{l_f} > 40 \text{ dB}$$

$$RL_f, RL_o \geq 3 \text{ dB}$$

15. In §68.308, paragraph (e), the reference to paragraph (e)(1) is revised to "paragraph (e)(1)(i)".

16. In §68.308, paragraph (e)(1)(ii) is added to read as follows:

(e) \*\*\*\*

(1) \*\*\*\*

(i) \*\*\*\*

(ii) 270 KHz to 6MHz. The rms value of the metallic voltage components in the frequency range of 270 kHz to 6 MHz shall, averaged over 2 microseconds, not exceed -15 dBV. This limitation applies with a metallic termination having an impedance of 135 ohms.

17. In Appendix C, FCC Record page number 19267, delete the text beginning at paragraph (d) "Longitudinal voltage at frequencies below 4 kHz" through page 19271.

18. In §68.308, paragraph (h)(1)(iii) reference to Table 68.308(b) is revised to read "Table 68.308(c)".

\*\*\*\*\*

#### Section 68.310 [corrected].

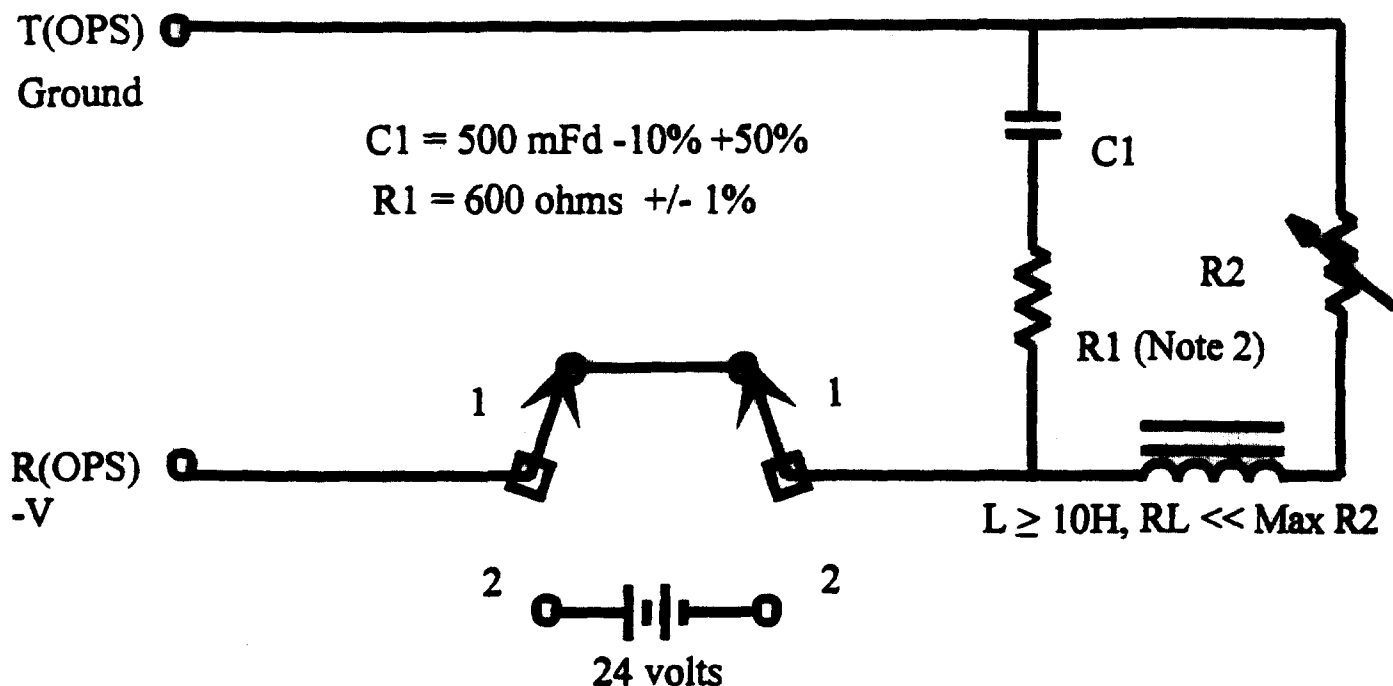
19. In §68.310, the table immediately following paragraph (b) is revised to read as follows:

STATE	Frequency (f)	Balance
Off-hook ...	$200 \text{ Hz} \leq f \leq 4000 \text{ Hz}$	$\geq 40 \text{ dB}$
Off-hook ...	$200 \text{ Hz} \leq f \leq 1000 \text{ Hz}$	$\geq 60 \text{ dB}$
Off-hook ...	$1000 \text{ Hz} \leq f \leq 4000 \text{ Hz}$	$\geq 40 \text{ dB}$

20. In §63.310, paragraphs (b)(3) and (b)(4) references to Figure 68.310(b) are revised to read "Figure 68.310(f)".

21. In §63.310, the last sentence of paragraph (b)(5) is revised to read: "The termination for all ports other than the particular one whose transverse balance coefficient is being measured shall have a metallic impedance of 600 ohms, and a longitudinal impedance of 500 ohms. Figure 68.310(c) shows this termination."

22. In §63.310, Figure 68.310-2 is revised to "Figure 68.310(f)".



		R2 + RL continuously variable over the following range		
Condition	Switch Position for Test	Class A	Class B	Class C
1	1	up to 200 ohms	up to 800 ohms	up to 1800 ohms
2	2	N.A.	200 to 2300 ohms	900 to 3300 ohms

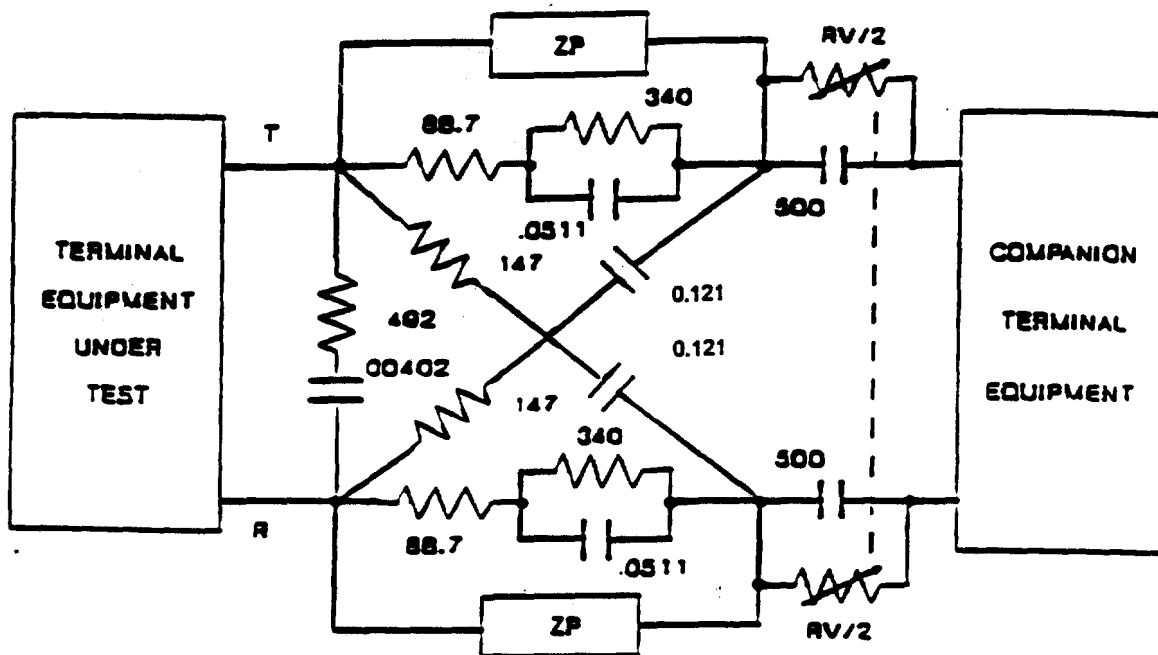
The minimum current for all resistance ranges shall be 16 ma.

Notes: (1) Means shall be used to generate , at the point of tip (T OPS) and ring (R OPS) connections to the PBX, the range of resistance and impedance which are employed by the illustrative circuit depicted above.

(2) In the transverse balance limitations , Section 68.310, the use of the dc portion of the loop simulator is specified. In such cases R1 and C1 shall be removed.

(3) Tests for compliance may be made with either R1 = 600 ohms or R1 replaced by the alternative termination specified in Figure 68.3(g).

**Off Premises Loop Simulator - Figure 68.3(f)**



Resistances (Ohms), Capacitances ( $\mu\text{F}$ ), Tolerances  $\pm 2\%$ .

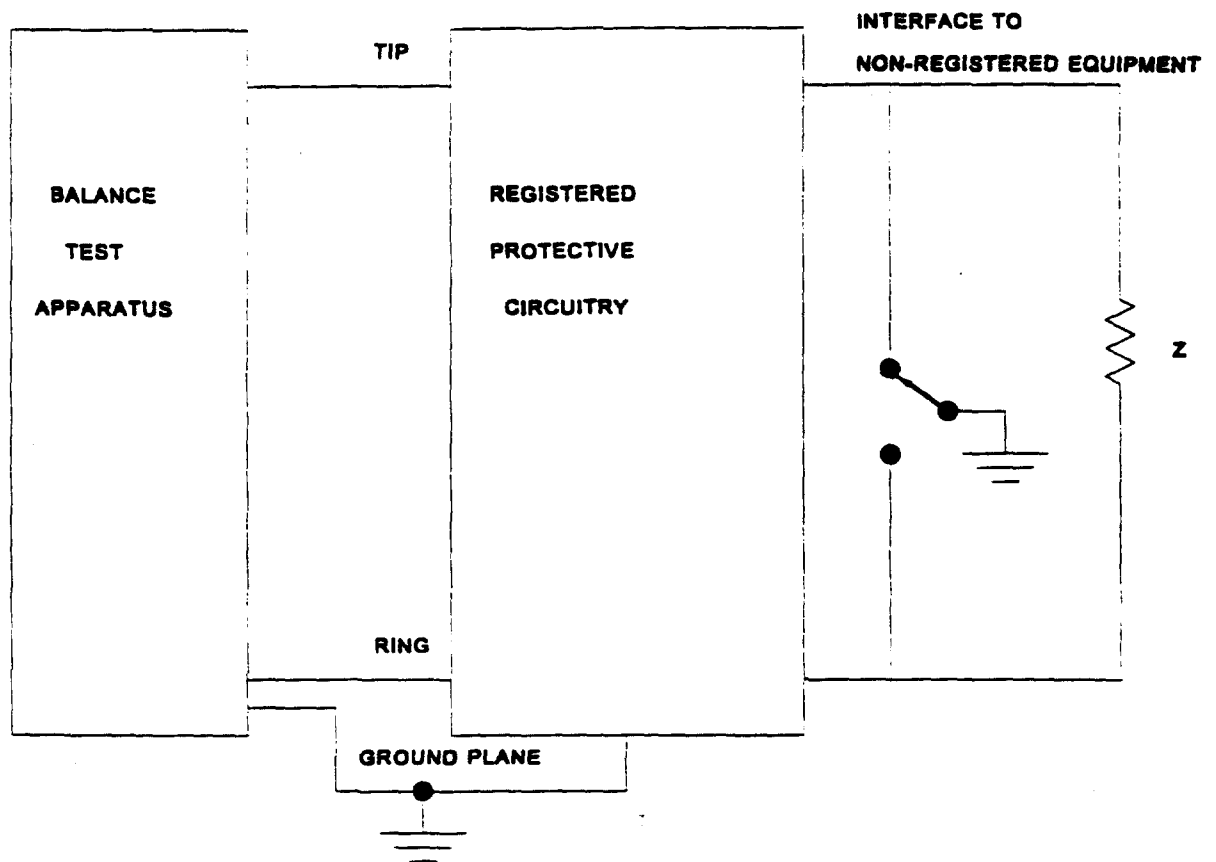
$RV + RP = 50$  thru  $3000$  Ohms.

$ZP$  is the magnitude of the lowpass filter impedance which is  $< 25$  Ohm dc;  $> 3$  Kohm from  $10$  Hz to  $6$  KHz.

$RP/2 =$  dc resistance of lowpass filter,  $ZP$  in parallel with  $428.7$  Ohm.

Figure 68.3(1) LADC Impedance Simulator for Metallic Voltage Tests





Z - Selected so that the reflected impedance at tip and ring is 600  $\Omega$ , 135  $\Omega$ , or 100  $\Omega$  depending on the service type of EUT

**FIGURE 68.310 (f)**  
**REQUIRED TERMINATION FOR CONNECTIONS TO NON-REGISTERED EQUIPMENT**